Racial/Ethnic Differences in Explanatory Models, Daily Lived Experience and Hypertension Management Behaviors

Barbara G. Bokhour, PhD



Gemmae Fix	Center for Health Quality, Outcomes & Economic Research
Jeffrey Solomon	Center for Health Quality, Outcomes & Economic Research
Ellen Cohn	Sargent College of Health & Rehabilitation Sciences, Boston University
Dharma Cortes	Harvard Medical School & Cambridge Health Alliance
Lois Katz	VA New York Harbor Healthcare System
Paul Haidet	Pennsylvania State University, School of Medicine
Ann Borzecki	Center for Health Quality, Outcomes & Economic Research
Alexander R. Green	Massachusetts General Hospital
Nancy R. Kressin	VA Boston Healthcare System
Nora Mueller	Center for Health Quality, Outcomes & Economic Research

Background

- Up to 30% of VA patients have uncontrolled hypertension (HTN)
- Disparities persist with African-American and Latino veterans having lower rates of control than White veterans
- Understanding the underlying reason for these disparities is critical for developing interventions to improve HTN control
- The role of patient perspectives, beliefs and management practices in HTN control remains poorly understood

Study Aims

- Our prior work showed that patients' explanatory models and daily lived experience affected their abilities to control their HTN
- Examine whether AA, White and Latino veterans differed with respect to explanatory models and daily lived experience managing HTN

Explanatory Models and Daily Lived Experience

- Explanatory models (EM)*: Patient beliefs regarding the cause, mechanisms & course of illness, and effects of treatment
 - > Why do I have HTN? What does HTN do to me?
 - How can I control my HTN? What are the symptoms?
 - > How serious is my HTN?
- Daily Lived Experience (DLE) patients' social context, routines and habits, and competing health problems that affect hypertension self-management.

^{*}The construct of explanatory models was first introduced by Kleinman (1988)

Methods

Participants:

White (n=19), Latino (n=9) and African-American (n=20)patients with uncontrolled hypertension at two large VAMC's with diverse populations

• Data collection:

- > Semi-structured 1-1 ½ hour qualitative interviews
 - Context of patients' lives
 - Patient management of hypertension
 - Patient beliefs about hypertension and treatment
 - Patient-provider relationship and communication
- > Audio-recording of patient-provider clinical encounter
 - One per patient

Data Analysis

- Verbatim transcripts thematically coded based on tenets of grounded theory methods
 - Focus on dimensions of explanatory models
 - Focus on daily lived experience
- 2 coders reviewed each transcript to identify aspects of EMs and DLEs
 - Honed in on key dimensions driving HTN management behaviors
- Reviewed by 2 additional coders
 - > 100% agreement through consensus discussion
- Tabulated key dimensions by race

Key Areas Driving HTN Management

- Explanatory models
 - Explanatory model different from biomedical explanatory model
 - i.e. HTN is intermittent, uncontrollable
 - Stress viewed as primary cause of HTN
 - Experiencing symptoms of HTN
 - Experiencing no symptoms of HTN
- Daily Lived Experience
 - Competing priorities
 - Living circumstances & context
 - > Role of life routines

Explanatory Model

A: If my blood pressure is anywhere between, let's say, 190 over 100, then I'm okay. As far as I'm concerned, I feel fine. I feel fine... So if after a point, I decide, well,... and it starts creeping up to 220 over 120, then I have to do something at that point. It's getting too high. I know that. (African-American, woman)

Stress

[What do you think hypertension is?]

It's **extreme tension**. But I'm not really sure of the fine points of it.

[What do you think causes it?]

A: I don't know. I guess **unusual stress**, your blood pressure being high. (White, Man)

Symptoms

If my blood pressure is still high— I'm pretty sure it's back under control now because I'm like really relaxed and stuff... Because I don't feel the pressure in my neck. And I usually check when I get pressure in the back. I'll check it and it will be high. (Latino, woman)

No Symptoms

But it doesn't affect me. If it would just hit me, boom! and it would like put me to a point where I was ... (inaudible), I'm getting dizzy from eating bacon or whatever, then I would change that, I wouldn't do that. But it hasn't. (African-American, man)

Daily Lived Experience

I live alone, you know? So I don't like cooking for one person. So I always go someplace to get lunches or dinners or whatever, or I go out and eat... Even eggs, you know, you can have a pinch of sodium in eggs, they already have it, they have sodium already. So everything that I eat might have sodium, and that little bit could bring it way up.

(Latino, man)

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA					
Latino					
White					

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA	65 %				
Latino	33%				
White	42%				

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA	65 %	45 %			
Latino	33%	44%			
White	42%	42%			

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA	65 %	45 %	25 %		
Latino	33%	44%	44%		
White	42%	42%	21%		

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA	65 %	45 %	25 %	15 %	
Latino	33%	44%	44%	0%	
White	42%	42%	21%	21%	

Race	Explanatory Model	Stress	Symptoms	No symptoms	Daily Lived Experience
AA	65 %	45 %	25 %	15 %	70 %
Latino	33%	44%	44%	0%	44%
White	42%	42%	21%	21%	74%

Conclusions

- African-American patients may have different explanatory models that drive HTN management
- Latino patients may manage HTN based on their experiences of symptoms such as headaches
- These may contribute to poorer HTN control among members of these groups
- Daily Lived Experience affects management for many patients
 - Specific aspects may differ for AA and Whites

Limitations

- Conclusions are limited due to small qualitative sample
- 2 sites may not represent these groups in other areas of the country
- Currently conducting a larger survey of AA, Latino & White veterans based on these qualitative findings

Implications

- Interventions to improve HTN among minority populations may benefit from focusing on patients' explanatory models and daily lived experiences
- Addressing the relationship of stress to HTN may benefit all patients
- Our ongoing communication analyses indicate that providers rarely address these issues in clinical encounters
- It is important for clinicians to recognize when these issues are present to effectively address the barriers to HTN management either directly or through referral to a case manager